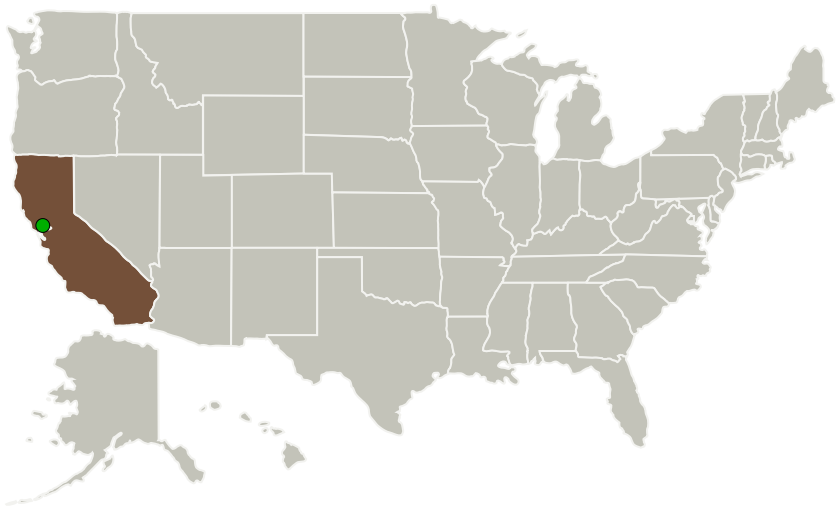
# Visual Intelligent Robot Performance Monitor, Phase I

Completed Technology Project (2012 - 2012)

## Project Introduction

We propose to develop a Visual Intelligent Robot Performance Monitor (VIRPM) that will help crew members maintain situation awareness of robot performance more effectively. VIRPM will provide intelligent assistance to crew members by detecting topical data that suggest possible problems (causes and effects), gathering additional topical data that provides supporting or rebutting evidence for each problem, and presenting routine and topical data graphically that enable crew members to quickly understand the situation. During Phase 1, we will specify intelligent data monitoring, analysis, and visualization requirements, create a high-level system design of the monitoring, analysis, and visualization software, and develop a software prototype that demonstrates the utility and feasibility of our approach.

## Primary U.S. Work Locations and Key Partners



| Organizations Performing Work | Role | Type | Location |
|---|---|---|---|
| Stottler Henke Associates, Inc. | Lead Organization | Industry | San Mateo, California |
| Ames Research Center(ARC) | Supporting Organization | NASA Center | Moffett Field, California |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| Primary U.S. Work Locations |
| --- |
| California |

## Project Transitions

**February 2012:** Project Start

**August 2012:** Closed out

**Closeout Documentation:**

- Final Summary Chart*(https://techport.nasa.gov/file/140683)*

## Organizational Responsibility

**Responsible Mission Directorate:**

Space Technology Mission Directorate (STMD)

**Lead Organization:**

Stottler Henke Associates, Inc.

**Responsible Program:**

Small Business Innovation Research/Small Business Tech Transfer

## Project Management

**Program Director:**

Jason L Kessler

**Program Manager:**

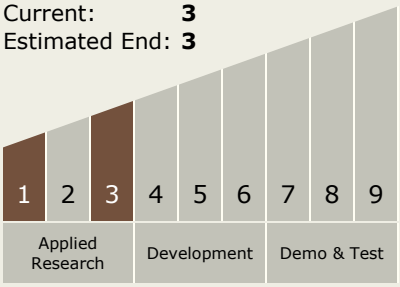
Carlos Torrez

**Principal Investigator:**

James C Ong

## Technology Maturity (TRL)

Start: **1**
Current: **3**
Estimated End: **3**



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## Technology Areas

**Primary:**

- TX04 Robotic Systems
  - TX04.4 Human-Robot Interaction
    - TX04.4.2 Distributed Collaboration and Coordination

## Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System